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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Nitesh Ratnakar

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7590

10/10/2007

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EXAMINER

LEUBECKER, JOHN P

ART UNIT

PAPER NUMBER

3739

MAIL DATE

DELIVERY MODE

10/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/711,859

Applicant(s)

RATNAKAR, NITESH

Examiner

John P. Leubecker

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3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-10,12-16 and 23-66 is/are pending in the application.
- 4a) Of the above claim(s) 23-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-10,12-16 and 40-66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

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Election/Restrictions

1. Applicant's election of Group I, claims 1-22 in the reply filed on August 22, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 23-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Drawings

3. Figures 1-4B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because:

- 1) the all occurrences of the phrase "The present invention" should be removed;
- 2) the abstract must be one paragraph.

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3) it should not refer to the purported merits or speculative applications of the invention

Correction is required. See MPEP § 608.01(b).

5. The disclosure is objected to because of the following informalities: all occurrences in the specification that state that the illumination bulb “is connected to a light source” should be changed to “is connected to a power source”. An illumination bulb IS a light source. Such requires a power source to operate.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, term “first direction” lacks antecedent basis. It appears that this should be “forward direction”.

Claim Objections

8. Claims 16 and 65 are objected to because of the following informalities: recitation that the illumination bulbs are “connected to a light source” are improper (note objection to

specification above) and should be changed to "connected to a power source". Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-3, 6, 10, 12, 13, 15, 16, 40-44, 47-51, 54-58, 61, 62, 64-66 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoon (U.S. Pat. 6,066,090).

Yoon discloses an endoscope comprising a first lens (56a, Fig.3) which can receive a first image in a forward direction (in the condition that it is not bent, note Fig. 8 for example) and a rear view module (48, Figs.3,4) including a second lens (56b) for simultaneously receiving a second image at a predetermined angle to the first direction (in the condition that it is bent, note Figure 4 for example). The rear view module (48) is attached to the side of shaft (47) (Fig.3,4) and is thus adjacent the outer periphery of the first lens. The rear view module (48) is steerable via an actuator up to approximately 180 degrees (note col.5, line 51 to col.6, line 34, which incorporates Shockey, U.S. Pat.5,168,864 and Hibino et al. by reference as showing a suitable steering control mechanisms; note col.2, lines 20-30 of Shockey which teaches 180 degree deflection and Figure 1, elements 10 and 13 of Hibino et al. which show multiple control wires). Any of the steering mechanisms disclosed or incorporated by reference by Yoon would

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anticipate a “biasing structure urging the rear view module towards the second position”. Note that all lenses operatively connect to an image processor (26) and monitor (27) (Fig.1). The rear view module can include a LED (54b) which is a “bulb” and requires a power source.

11. Claims 1-3, 5-7, 10, 12, 13, 40-42, 44, 46-49, 51, 53-56, 58, 60-62 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Irion (U.S. Pat. 5,166,787).

Irion discloses an endoscope (2) with a main duct (4) which can include conventional endoscope optics with a first lens (col.8, lines 27-30) and a rear view module (Figs.6a-6c) which is pivotally attached (either by ball joint 20, or hinging around rod 3, col.10, lines 30-32) and including a second lens (either 10' or 10'') which can provide view angle different than the first lens by 180 degrees. Rod 3 constitutes an actuator/biasing structure for moving the module. Images are electronically obtained and thus would inherently require a processor and display for viewing.

12. Claims 1-3, 6-10, 13, 14, 40, 42, 47, 54-56, 62 and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Mitsui (U.S. Pat. 3,889,662).

Mitsui discloses an endoscope with a first lens (19) having a first direction and second lens (20) for receiving an image in a second direction at an angle (i.e., 90 degrees) to the first direction. The part of the housing surrounding the lens (20) constitutes a rear view module and provides for it being attached to the front end and side of the shaft (11b). Since shaft (11b) forms a channel (interior of the shaft), the rear view module is considered to be embedded in and passing through a channel of the shaft. Flexibility (note 12, Fig.1) and the ability to move the

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endoscope axially provide movement of the rear view module from a first to a second position.

Both images are displayed in an eyepiece (25, Figs.3 and 4), which can be considered, as broadly as claimed, as a display screen.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 45, 52 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoon in view of Ueda (U.S. Pat. 4,832,473).

Yoon discloses a generic steering mechanism and refers to Bowden cable type in the prior art but fails to mention all prior art mechanisms that would fall under the category of "steering mechanism". Ueda is just one example in the endoscope art that inflatable bladders have been contemplated for steering mechanisms. At least Ueda believes that the inflatable bladder steering mechanism is easier and more reliable than that involving an angle knob (Bowden cables) (col.2, lines 23-28). It would have been obvious to one of mere ordinary skill in the art to have used any known and contemplated steering mechanism in the device of Yoon, including inflatable bladders which Ueda teaches are an improvement over cable type steering mechanisms.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okada et al. (US 2005/0165272)

Kazakevich (U.S. Pat. 6,916,286)

Sonnenschein et al. (U.S. Pat. 6,997,871)

Wendlandt et al. (US 2002/0099267)

MacAnally et al. (U.S. Pat. 4,846,154)

Fowler et al. (US 2007/0032700)

Yokoi et al. (US 2007/0142710)

Kaiya (U.S. Pat. 5,178,130)

Okada et al. (U.S. Pat. 5,653,677)

Kimura (U.S. Pat. 5,940,126)

Hayamizu et al. (U.S. Pat. 3,918,438)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769.

The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John P. Leubecker/
Primary Examiner
Art Unit 3739

jpl